

REMARKS

The Examiner has rejected the claims as being unpatentable over Hull (WO 91/01711 A1) in view of Okamoto (JP 08-057051 A). Applicant respectfully traverses.

The Examiner's main contention seems to be that if Okamoto teaches to use a roughened syringe wall to improve dispensing and Hull teaches a syringe for freezing adhesive for human tissue, then it would have been obvious to use this combination of elements in a method to reduce freeze-thaw voids in uncured adhesives. Although such a combination of prior art elements might be obvious when it does no more than yield predictable results, that is not the case here. There is no apparent reason in Hull or Okamoto to combine their elements to reduce freeze thaw voids because dispensability is independent of the presence of freeze thaw voids. It is possible to have ease of dispensing and still have freeze thaw voids. It was unpredictable that roughening would reduce freeze thaw voids. An inventive method is not proved obvious merely by demonstrating that each element was, independently, known in the prior art. It is necessary to identify a reason that would have prompted a person of ordinary skill in the art to combine the elements for the intended result, and that has not been done.

Applicant has amended claim 14 to recite that the inventive method consists essentially of the stated steps, and thus would not encompass the steps in Hull needed to freeze the tissue adhesive, those steps being superfluous to the inventive method. Also, the recitation of the flexural modulus in the claims indicates the need for flexibility.

Applicant incorporates here the arguments made in previous responses, and reiterates those, in brief, to show why the combination of Hull and Okamoto do not obviously lead to the claimed invention.

Hull discloses a medical dispensing system for making tissue adhesive components, accomplished by placing a solution or colloid containing the desired tissue adhesive components in a container, closing the container and freezing the solution or colloid in the container while the container is rapidly rotated around its axis to coat at least one interior surface of the container with a thin coating of

frozen tissue adhesive component. In the instant invention, a solution or colloid of adhesive is *not* formed, the container is *not* rotated rapidly around its axis, and the walls are *not* coated with a thin film of tissue adhesive. Moreover, the Hull container can be made of some plastics, metal, or glass, this grouping of metal and glass with plastics indicating that these are not flexible containers. Thus, Hull does not make obvious the instant invention as there is no teaching or suggestion in Hull to use a thin walled container, or a flexible container, for the method of reducing freeze/thaw voids in a frozen adhesive, as now presented by claim 14.

Okamoto is directed to a syringe for holding liquid medicines, the syringe prepared from PETD, a random copolymer of ethylene and TCD. TCD is a tetracyclododecene. Example 1 notes that the syringe was prepared from an ethylene/dodecene copolymer known as Apel 6509, a product of Mitsui Petrochem Chemical Co. Information from the website for Mitsui indicates that the Apel syringes, including 6509 (T) have a flexural modulus greater than 2400 MPa. Both the composition and the flexural modulus of the syringe used in the Okamoto patent are distinctly different from the composition and flexural modulus of the syringe in the instant claimed method.

Applicant respectfully urges the Examiner to the conclusion that the above references, alone or in combination, do not make obvious the current invention, and that the claims are in condition for allowance.

END OF REMARKS